

Notice of Allowability	Application No.	Applicant(s)	
	09/998,208	NOBORIMOTO ET AL.	
	Examiner	Art Unit	
	Kim-Kwok CHU	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 1/3/05.
2. ☒ The allowed claim(s) is/are 2-10 which are renumbered as 1-9 respectively.
3. ☒ The drawings filed on 03 December 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Allowable Subject Matter

1. Claims 2-10 are allowable over prior art.
2. The following is an Examiner's statement of reasons for the indication of allowable subject matter based on the Amendment filed on January 3, 2005.

As in claim 2, the prior art of record fails to teach or fairly suggest the following features:

- (a) a light source for emitting an optical beam having a wavelength of about 780 nm;
- (b) an objective lens having a numerical aperture (NA) of about 0.62 and serving as a means for converging the optical beam emitted by the light source and then radiating the converged optical beam to the optical disk;
- (c) a liquid-crystal means provided on an optical path between the objective lens and the radiation means; and
- (d) a voltage-applying means for applying a driving voltage to the liquid-crystal means so as to change an electrode pattern of the liquid-crystal means.

As in claims 5 and 8, the prior art of record fails to teach or fairly suggest an optical disk recording and reproducing apparatus having the following features:

(a) capable of recording and reproducing an information signal onto and from an optical disk with any of a plurality of types having different track pitches of recording tracks;

(b) a light source for emitting an optical beam having a wavelength of about 780 nm;

(c) an objective lens having a numerical aperture (NA) of about 0.62 and serving as a means for converging the optical beam emitted by the light source and then radiating the converged optical beam to the optical disk; and

(d) a spot-diameter control means for controlling a spot diameter of the converged optical beam radiated by the objective lens to the optical disk, wherein the spot-diameter control means adjusts the spot diameter of the converged optical beam radiated by the objective lens to the optical disk in accordance with the type of the optical disk determined by the discrimination means.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kikuchi et al. (6,885,616) is pertinent is pertinent because Kikuchi teaches an optical pickup having a liquid-crystal device as an aberration correction means.

5. Any response to this action should be mailed to:
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:
(703) 872-9306 (for formal communications intended for
entry. Or:

(571) 273-7585, (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

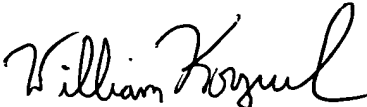
Any inquiry of a general nature or relating to the status
of this application should be directed USPTO Contact Center
(703) 308-4357; Electronic Business Center (703) 305-3028.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Kim CHU
whose telephone number is (571) 272-7585 between 9:30 am to
6:00 pm, Monday to Friday.

Kim-Kwok CHU

1K 4/29/05
Examiner AU2653
April 29, 2005

(571) 272-7585


WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600